# Description of *Muricopsis (Muricopsis) gorii* (Gastropoda: Muricidae: Muricopsinae) from southern São Tomé

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KEYWORDS. São Tomé, Muricidae, Muricopsinae, Muricopsis n. sp.

**ABSTRACT.** A new species of *Muricopsis* is described from Sete Pedras Island, São Tomé. It is compared with *Muricopsis matildeae* Rolán & Fernandes, 1991.

**RESUME.** Une nouvelle espèce de *Muricopsis* est décrite de l'île de Sete Pedras à São Tomé. Elle est comparée avec *Muricopsis matildeae* Rolán & Fernandes, 1991.

## INTRODUCTION

A few muricopsine species were described recently from São Tomé and Príncipe and from Annobon Island by Rolán & Fernandes (1991), Houart & Rolán (2001), Houart (2005), Rolán & Gori (2007) and Houart & Gori (2008).

Four Recent species and one subspecies of *Muricopsis* s.s. were described from São Tomé: *M. (M.)* matildeae Rolán & Fernandes, 1991, *M. (M.)* rutilus mariangelae Rolán & Fernandes, 1991, *M. (M.)* delemarrei Houart, 2005, *M. (M.)* luernandezi Rolán & Gori, 2007, and *Muricopsis (M.)* testorii Houart & Gori, 2008. Two other species are known from two closely situated islands: *Muricopsis (M.)* principensis Rolán & Fernandes, 1991- which occurs only in Príncipe and *M. (M.)* annobonensis Houart & Rolán, 2001 which is endemic to Annobon Island.

The new species described herein was recently discovered east of Sete Pedras Island (Fig. 1).

### **Abbreviations**

IRSNB: Institut royal des Sciences naturelles de Belgique, Bruxelles, Belgium.

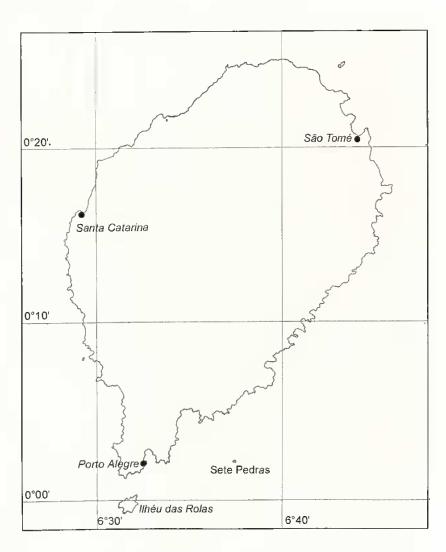
MNHN: Muséum national d'Histoire naturelle, Paris, France.

PR: Collection Peter Ryall. RH: Collection Roland Houart. SG: Collection Sandro Gori.

Terminology used to describe the spiral cords and the internal denticles of the outer lip (based on Merle 1999 and 2001) (Fig. 2).

P: primary spiral cord; SP: subsutural cord;

P: shoulder cord; P2-P6: primary cords of the convex part of the teleoconch whorl; ADP: adapical primary cord on the siphonal canal; MP: median primary cord on the siphonal canal; ID: infrasutural denticle of the aperture; D1 to D5: abapical denticles of the aperture



**Fig. 1.** Map of São Tomé and location of the type locality of *Muricopsis (M.) gorii* n.sp.

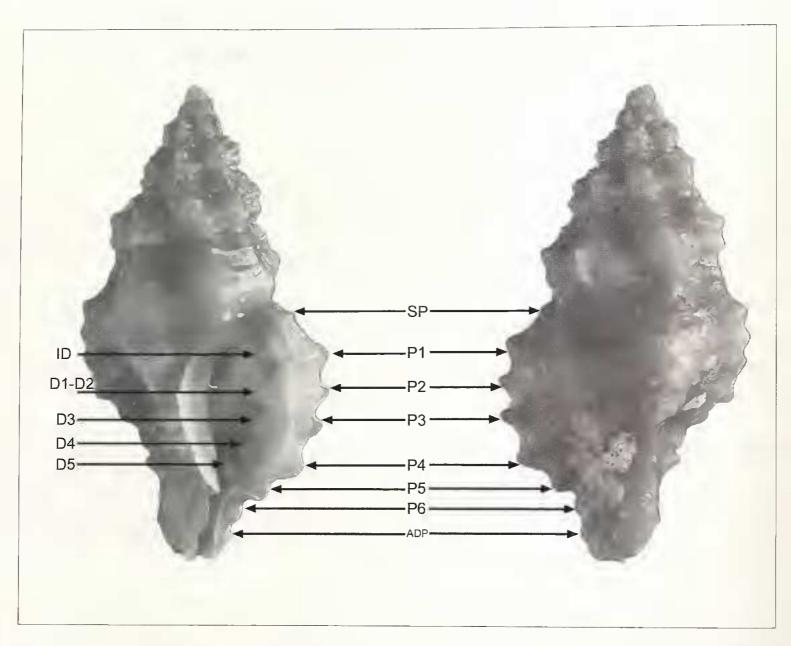


Fig. 2. Muricopsis (Muricopsis) gorii n. sp. Spiral sculpture and apertural denticle morphology (paratype SG, 9.6 mm).

# **SYSTEMATICS**

Family **MURICIDAE** Rafinesque, 1815 Subfamily **MURICOPSINAE** Radwin & D'Attilio, 1971

Genus *Muricopsis* Bucquoy & Dautzenberg, 1882 Subgenus *Muricopsis* Bucquoy & Dautzenberg, 1882 Type species by original designation: *Murex blainvillei* Payraudeau, 1826 (= *Murex cristatus* Brocchi, 1814). Recent; Mediterranean.

Muricopsis (Muricopsis) gorii n. sp. Figs 1, 2, 3-8

Type material. Holotype MNHN 24275, 8.6 mm, 1 paratype PR, 9.6 mm, 1 paratype RH, 9.6 mm, 2

paratypes SG, 8.5 mm and 9.9 mm, São Tomé, east of Sete Pedras, 30 m, collected on small rounded stones.

**Distribution.** Currently only known from Sete Pedras, São Tomé, in 30 m.

**Description.** Shell small for the genus, up to 9.9 mm in height at maturity. Height/width ratio 1.9 - 2.1. Slender, biconical, weakly spinose, nodose, lightly built. Subsutural ramp broad, weakly concave, weakly sloping on spire whorls, more strongly sloping on last teleoconch whorl. Bright orange, weakly darker coloured on subsutural ramp, outer edge of columellar lip and apertural denticles lighter coloured or white.

# Figures 3-15

3-8. *Muricopsis (Muricopsis) gorii* Houart, n. sp., East of Sete Pedras, São Tomé, on small rounded stones, 30 m 3-4. Holotype MNHN 24275, 8.6 mm; 5-6. Paratype SG, 9.9 mm; 7-8. Paratype RH, 9.5 mm.

9-14. Muricopsis (Muricopsis) matildeae Rolán & Fernandes, 1991.

9-10. Lago Azul, São Tomé, 15 m, SG, 9 mm; 11-14. Ponto de Diego Vaz, São Tomé, 12 m, SG. 11-12. 9.6 mm; 13-14. 10.4 mm.

15. Muricopsis (Muricopsis) testorii Houart & Gori, 2008. Northwest São Tomé, Lagoa Azul, 00°24.41' N, 06°36.18' E, offshore, 37 m, on dead corals, holotype IRSNB IG.31 042/MT1977, 18.8 mm.



Spire high with 1.5 protoconch whorls and teleoconch up to 4 or 5 broad, convex, strongly shouldered, nodose whorls. Suture adpressed. Protoconch small, whorls smooth with a narrow, strong, single kccl adapically. Protoconch of holotype with a second weak shallow keel abapically, width 600-650 µm. terminal lip narrow, weakly raised, curved.

Axial sculpture of teleoconch whorls consisting of moderately high, strong, broad, nodose ribs and varices. First and second whorl with 7 or 8 ribs, third and fourth with 6 or 7 ribs, last whorls with 4 or 5 broad, moderately high varices, each with 5 small, broad, short open spines at intersection of P1-P5 spiral cords with axial varices. Spiral sculpture of moderately high, narrow primary cords: first teleoconch whorl with visible SP, P1 and P2, second with SP, P1, P2 and P3 partially covered by succeeding whorl, and several threads between primary cords. Last whorl with SP, P1-P6, ADP and occasional MP. Presence of several narrow threads between each pair of cords. P1-P4 of approximately similar size and strength, P5 and P6 narrower.

Aperture small, ovate. Columellar lip broad, lip strongly flaring abapically, adherent at adapical extremity, smooth. Anal notch deep, narrow. Outer lip erect, smooth, with 5 strong denticles within: ID, D1-D2 fused, D3, D4 and D5. Siphonal canal short, narrow, straight, weakly tapered abapically, narrowly open.

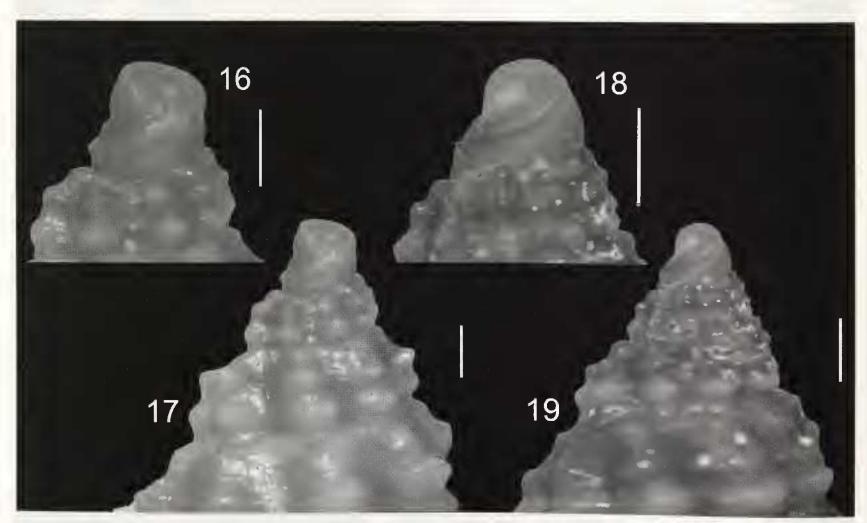
Operculum and radula unknown.

Remarks. Muricopsis (M.) gorii n.sp. is closely related to Muricopsis (M.) matildeae which lives in Sao Tomé and Príncipe and which, together with its typical form (Figs 9-10), shows a variety of shell colours from light orange to dark brown, occasionally with a white siphonal canal (Figs 11-14). However, all these forms are sympatric and the shell morphology is quite similar. Not any of these could be definitely separated from the typical shell.

Muricopsis (M.) gorii, in addition to having a bright dark orange colour, differs from M. matildeae in having a more strongly shouldered and angulate shell; higher and comparatively broader axial ribs on the 3 or 4 adapical teleoconch whorls and still higher and more conspicuous on the last teleoconch whorl but comparatively narrower than in M. matildeae; in having a less sloping subsutural ramp from second to last teleoconch whorls, and in having blunt, broad, short spines at intersection of axial and spiral sculpture while absent or low in M. matildeae.

Muricopsis (M.) testorii Houart & Gori, 2008 (Fig. 15), another species described from Sao Tomé is also orange coloured but differs in many ways (size and shell morphology) and doesn't need to be compared here.

The other *Muricopsis* s.s. species described from São Tomé, Príncipe and Annobon are very different and don't need to be compared either.



Figures 16-19. Protoconchs (scale bar: 0.5 mm)

16-17. *Muricopsis (Muricopsis) gorii* n. sp. 16. Protoconch; 17. Protoconch and first teleoconch whorls. 18-19. *Muricopsis (Muricopsis) matildeae* Rolán & Fernandes, 1991. 18. Protoconch; 19. Protoconch and first teleoconch whorls.

**Etymology.** I am particularly pleased to name this new species in honour of Sandro Gori (Livorno, Italy) who kindly donated the types and other material and who discovered many new taxa during his field trips in São Tomé and Príncipe.

#### ACKNOWLEDGEMENTS

I am very grateful to Sandro Gori for the opportunity he gives me to study his material and for donating specimens. Thanks also to John Wolff, Lancaster, Pennsylvania, USA, for checking the English text.

### REFERENCES

- Houart, R. 2005. Description of a new species of *Muricopsis* (Gastropoda: Muricidae: Muricopsinae) from São Tomé, West Africa. *Novapex* 6(4): 119-122.
- Houart, R. & Gori, S. 2008. Description of a new *Muricopsis* species (Muricidae: Muricopsinae) from Northwest São Tomé. *Novapex* 9(4): 149-153.

- Houart, R. & Rolán, E. 2001. A new *Muricopsis* (Gastropoda, Muricidae) from Annobón Island, Eastern Atlantic. *Novapex* 2(2): 61-66.
- Merle D. 1999. La radiation des Muricidae (Gastropoda: Neogastropoda) au Paléogène: approche phylogénétique et évolutive. Paris. Thèse de doctorat du Muséum national d'Histoire naturelle: i-vi, 1-499.
- Merle D. 2001. The spiral cords and the internal denticles of the outer lip in the Muricidae: terminology and methodological comments. *Novapex* 2(3): 69-91.
- Rolán, E. & Fernandes, F. 1991. *Muricopsis* (*Risomurex*) (Gastropoda, Muricidae) de las islas de São Tomé y Príncipe (Golfo de Guinea, Africa Occidental). *Apex* 6(1-2): 11-20.
- Rolán, E. & Gori, S. 2007. A new species of *Muricopsis* (Muricidae: Muricopsinae) from São Tomé Island. *Novapex* 8(1): 23-26.